

## **AMENDMENT TO THE CLAIMS**

**1. (Currently amended)** A process for purification of CMP-N-acetylneuraminic acid (CMP-NeuAc) without employment of any chromatography treatment, comprising the following steps (1) to (4):

step (1): a step of adding a calcium ion or a ~~magnesium~~-manganese ion to a CMP-NeuAc-containing solution, thereby causing phosphoric acid, pyrophosphoric acid, and a nucleotide which coexist with CMP-NeuAc to precipitate, wherein the CMP-NeuAc-containing solution is a solution obtained by catalytic reaction of cytidine 5'-triphosphate (5'-CTP) and neuraminic acid (NeuAc) by use of CMP-NeuAc synthetase as a catalyst;

step (2): a step of adding a phosphatase to the CMP-NeuAc-containing solution, thereby converting the nucleotide which coexists with CMP-NeuAc into a nucleoside;

step (3): a step of adding an alcohol having a carbon number of 5 or less, thereby precipitating CMP-NeuAc in the form of salt; and

step (4): a step of collecting the thus-precipitated CMP-NeuAc,  
~~wherein steps (1) and (2) are performed in a sequence selected from:~~

~~step (1) and then step (2), or~~

~~step (1) and step (2) performed simultaneously; and~~wherein these steps are performed in a sequence selected from:

step (1), step (2), step (3), and then step (4), or

step (1) and step (2) are performed simultaneously and then steps (3) and (4) are performed sequentially, and

wherein the thus-precipitated CMP-NeuAc in the form of salt has a purity measured by HPLC of 95% or more.

### **2-4. (Cancelled)**

**5. (Currently amended)** ~~A~~The process according to claim 1, wherein step (3) and step (4) are performed a plurality of times.

### **6. (Cancelled)**

**7. (Currently amended)**    ~~A-The~~ process according to claim 1, wherein the phosphatase is *Escherichia coli* alkaline phosphatase.

**8. (Cancelled)**

**9. (Currently amended)**    ~~A-The~~ purification process according to claim 1, wherein the CMP-NeuAc collected in step (4) is subjected to cation exchange reaction for substitution of the cationic moiety of the CMP-NeuAc.

**10. (Currently amended)**   ~~A-The~~ purification process according to claim 9, wherein the cation exchange reaction employs an ion-exchange resin.